



Navigating adaptive approaches for development programmes

A guide for the uncertain

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Key messages

- Adaptive approaches have emerged in several sectors, including software development, product and service design, technology startups and international development.
- Adaptive approaches can help practitioners counteract misplaced certainty. By talking to potential users, understanding institutions, interests and ideas and investigating the root causes of a problem, practitioners applying these approaches can illuminate the underlying nature of the problem and context.
- Rather than building a whole solution straight away, these approaches commonly encourage practitioners to start small and use structured cycles of testing and learning. There is scope to further consider how different approaches can be better brought together and combined.
- Adaptive approaches in development provide a wider range of options for what to create and facilitate – not only products or services, but also forms of collective action. There are also alternative ways to think about scale – considering how others might take up an idea and looking for leverage, rather than quantity.



LearnAdapt

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Acronyms

| | |
|--------------|-----------------------------------------------------|
| DFAT | Department of Foreign Affairs and Trade (Australia) |
| DFID | Department for International Development (UK) |
| FCDO | Foreign, Commonwealth and Development Office (UK) |
| HCD | human-centred design |
| MVP | minimum viable product |
| PDIA | problem-driven iterative adaptation |
| PEA | political economy analysis |
| TWP | thinking and working politically |
| USAID | US Agency for International Development |

Executive summary

In uncertain and volatile contexts, where the path to a desired outcome is not known upfront, a linear plan-and-execute approach is unlikely to work. This is especially the case with transformative change in complex systems. However, when faced with complexity and disruption, it is tempting to hold onto what we know, reducing problems to fit the tools we have. Adaptive approaches help by providing rhythms and processes for listening, learning, reflecting, making decisions and acting. These approaches have arisen in several sectors, for example in software development (agile), product and service design (human-centred design (HCD)) and technology startups (lean startup, lean impact). In international development they take the form of adaptive management, thinking and working politically (TWP) and problem-driven iterative adaptation (PDIA).

Adaptive approaches help practitioners grapple with uncertainty and complexity. Using adaptive approaches can help counteract misplaced certainty in how problems are thought about and tackled. By talking to potential users, understanding institutions, interests and ideas and investigating the root causes of a problem, practitioners using these approaches help to illuminate the underlying nature of the problem and the context. These approaches help us to understand the system in which we are working, and to continue to reflect on that throughout an intervention.

Rather than building a whole solution straight away, these approaches encourage us to start small in order to learn and adapt more quickly (and cheaply). They commonly use structured cycles of testing and learning, with opportunities to gather and reflect together. HCD elevates human experience and creativity, encouraging a wide set of potential solutions

and iterative prototyping to test options with users before committing in full. Lean startup provides a robust framing for learning and experimenting quickly where we know least. Teams test assumptions proactively with prototypes, to identify whether users value a product or service, whether there is a route to scale and (when applied to social problems in the form of lean impact) whether a product or service is helping people. Taken a step further, these experiments could be embedded in a portfolio of initiatives which could together create the conditions for systemic change. TWP remains important throughout, to understand the changing context and make politically-informed decisions.

For those working in international development, having a diversity of approaches to draw on, including those from outside the development sphere, is a good thing. Indeed, development practice has begun to learn from these methods, to open up more and earlier and build in more diverse user feedback. The case of PDIA, which is itself a fusion of some of the other approaches, shows that these approaches can be fruitfully combined. However, while all of these approaches are valuable when used in the right context, practitioners may be perplexed by the multiplicity of methods and jargon. This paper aims to address some of this confusion by mapping where these approaches have come from and showing how they can be applied across the adaptive programme cycle. Armed with this knowledge, practitioners might experiment with different combinations and sequences of adaptive approaches according to the kind of problem and context faced. In turn, this may help us move beyond a siloed view of approaches linked to innovation, adaptive management or more politically smart ways of working.

1 Introduction

The basic principles of the test-and-learn approach apply in almost any situation where people are trying to solve problems in dynamic, uncertain conditions (Berger, 2014: 122).

This paper is about how to learn and adapt in conditions of uncertainty. The approaches that it describes originate in different sectors but have a number of shared principles. They are all used when one cannot determine the ‘correct’ course of action ahead of time. They all reject linear planning and execution, whether that is ‘waterfall’ project management in the software world or blueprints copied from one country to another in the development sector without considering whether they meet local needs. They all work in cycles of testing, learning and adaptation, and often aim to engage with users early on. They are all responses to uncertainty and complexity. Lessons from one approach might be applied in another context, and approaches may be combined.

This paper compares six of the most prominent adaptive approaches to emerge over the past two decades.¹ Three come from the world of innovation, largely in the private sector (agile, lean startup and HCD), and three from the global development sector (TWP, forms of adaptive management and PDIA). Mostly

applied at the project or product level, they are used by software developers, startup founders, designers, civil servants, programme managers and development entrepreneurs.

Comparing adaptive approaches can be like comparing apples and oranges. Some refer to particular methods and tools, while others embody more conceptual approaches that can be interpreted in many ways. In the development sector, approaches often overlap. Some have fed off each other, sometimes indirectly and sometimes explicitly, such as lean impact growing out of lean startup. This paper does not attempt to provide a definitive classification. Instead, it aims to help make sense of some of the similarities and differences across and between these approaches.

This paper partly grew from internal reflections within the LearnAdapt² programme team on bridging our own siloes and clarifying what we can offer together. It is primarily aimed at those in the international development sector who are already practising adaptive management and want to widen the possible approaches they draw on or make more informed choices in the future about which approaches to use, when and why. While all of these approaches are valuable when used in the right context, practitioners may be perplexed by the multiplicity of methods and jargon associated with adaptive approaches. We are at risk of moving from the

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- 1 There are a number of adaptive approaches this paper does not discuss in detail, including methods to explore future scenarios, uncertainties and risks (foresight), systems practice and behavioural design (combining human-design methods with experimentation and building on behavioural insights). These approaches overlap to a degree with the ones discussed in detail. Behavioural design, for example, applies the experiences of behavioural insight and HCD practitioners in designing context-fit and relevant experiments (Tantia, 2017).
 - 2 LearnAdapt is a collaboration between the UK Foreign, Commonwealth and Development Office (FCDO), ODI, Brink and Feedback Labs to explore how to manage adaptive development programmes better. It draws on approaches from the development and tech sector including adaptive management, agile ways of working and lean startup. See www.odi.org/projects/2933-learnadapt-innovation-and-adaptation-dfid.

methodological monoculture of the log frame to a paralysing Tower of Babel.³ This paper aims to address some of this confusion by showing how these approaches can be applied across the adaptive programme cycle, from understanding problems to creating the conditions for scale and sustainable change.

As shown in the next section, the origins of adaptive approaches tend to involve a shared recognition of failure to grapple with complexity and uncertainty. For example, in software there was a long lag, approximately three years, between stating a project's requirements and an actual application being shipped. Over those three years those requirements were likely to shift, leading to software being obsolete on arrival (Varhol, 2015). Similarly, conventional approaches to business planning, market research and product development do not work in the fast-paced world of technology startups. While spending months or years refining a product or service before sharing it with prospective customers might work in an established industry with known customers, a startup taking this approach is likely to fail very quickly because it operates

in conditions of uncertainty and volatility (Ries, 2011a). On the development side, a significant body of evidence suggests that blueprint planning approaches can lead to large-scale failures in conditions of uncertainty and complexity; instead, sustained change emerges from identifying locally determined, context-specific and politically smart solutions (Therkildsen, 1988; Ramalingam, 2013; Booth, 2015).

Pioneers developed adaptive approaches in different sectors to tackle uncertainty, rather than ignoring it. Development practitioners can learn from this wealth of experience and integrate some of it into their thinking and practice, be it throughout a project or in a more discrete way.

The paper begins with an introduction to the origins of each approach, to set the scene. It then explores how to use practices from these approaches throughout the adaptive programme cycle. This takes us from diagnosing a problem and understanding the context, through to implementing and learning via feedback loops, to adapting with the end in mind. The conclusion sets out how these approaches might be fruitfully combined.

3 B. Ramalingam, personal communication, 2020.

2 Introducing each approach

The concepts and terminology of innovation and adaptive approaches can be confusing, at least at first. How is agile different to lean? How is a prototype different from a minimum viable product? This chapter tells the origin story of each approach, explains its context and summarises core practices. The rest of the paper dives deeper into working patterns, techniques and examples.

2.1 Agile

Agile is a time boxed, iterative approach to software delivery that builds software incrementally from the start of the project, instead of trying to deliver it all at once near the end (Rasmusson, 2014).

In the early 1990s, software development faced a crisis. It was estimated that there was a three-year lag from start to finish in developing a product: from stating a software project's requirements to an actual application being produced and shipped in the form of floppy disks and CD-ROMs. Over those three years, these requirements – or indeed the whole business – were likely to shift, especially as technology advanced. At the time, software was developed according to a heavyweight and linear methodology known as 'waterfall'. This borrowed from approaches to physical engineering. It is called waterfall because teams complete one step before moving on to the next – flowing in one direction only. The prevailing wisdom among software developers was that more time spent planning at the outset would save money later on. This resulted, however, in lengthy design processes

so that the software was often out of date by the time it was released, and there were gaps between what users needed and how these needs were translated into software design (Varhol, 2015).

Alternative approaches began to emphasise incremental improvement (trial and error) and creating working prototypes (Boehm, 1988). A major driver was the move from tangible product to software delivered online. Developers suddenly got the ability to make continuous updates they could deliver to customers in real time. In 2001, 17 software experts gathered in Snowbird, Utah, and created the Agile Manifesto, outlining 12 principles for building working software quickly and getting rapid feedback from end users (Beck et al., 2001). This approach offered dual benefits: helping to deliver software more quickly, and providing the ability to test features and change course at an early stage. The Agile Manifesto combined best engineering practices known as 'Extreme Programming' and an approach centred around small teams working towards a common goal in iterative development cycles known as Scrum (a reference to rugby). Agile teams 'build quickly, test what they've built and iterate their work based on regular feedback' (UK Government, 2020).

Today, surveys suggest that agile is now used by most IT professionals, whether this is 'pure agile' or a hybrid with traditional waterfall methods. This shift has happened in the last 10 years (Jeremiah, 2017). Agile is now applied to other types of projects and products far beyond software. At the World Bank, a community of 200 'Agile Champions' has been established as part of an effort to create a culture of continuous improvement (World Bank, 2019).

2.2 Human-centred design

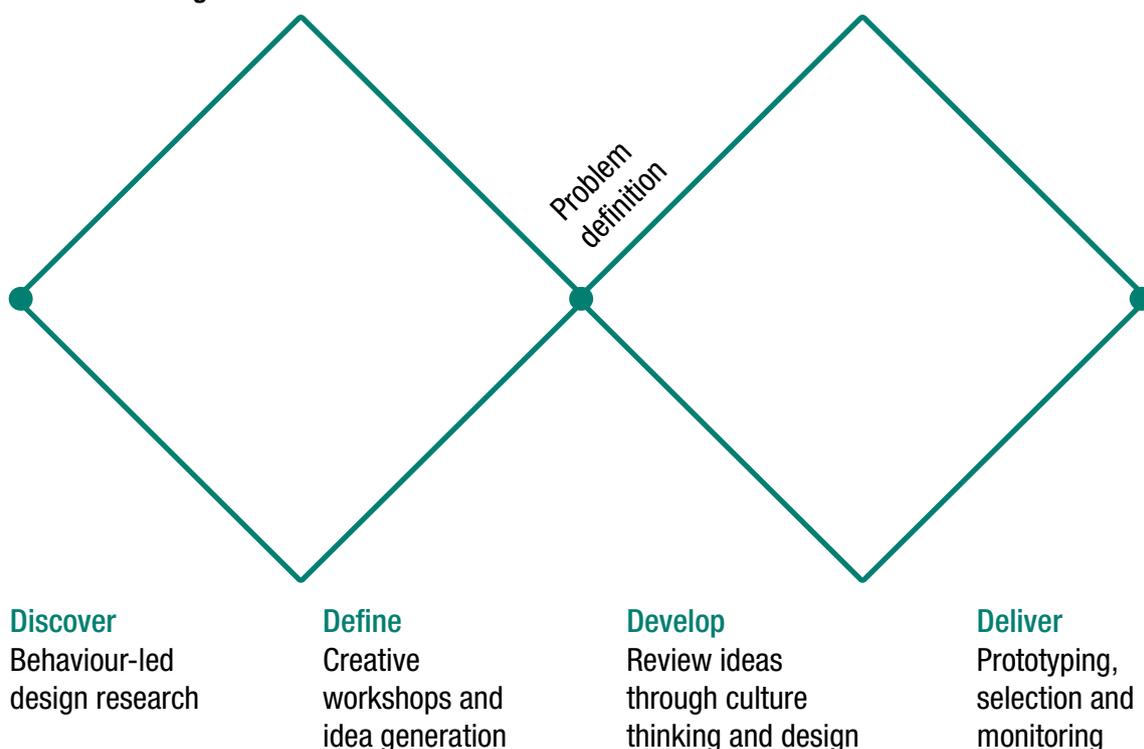
Originating in product design, design thinking involves generating and testing creative solutions that people will adopt. Within this approach, HCD focuses on understanding the users of products or services and creating things which are beneficial to them. Human perspectives are considered at multiple points in the design process, from observing what the problem is, through coming up with ideas, to testing out potential solutions. Establishing a personal connection with users in order to see the world through their eyes and gain a deep understanding of their needs is therefore crucial. User-experience design (often shortened as ‘UX design’) can be seen as a subset of HCD. This aims to improve the experience of the user, in terms of usability, accessibility and pleasure, drawing on insights from psychology and other social sciences (Interaction Design Foundation, n.d.).

One way to visualise the design process is the UK Design Council double diamond (see Figure 1). The first diamond is the process of problem discovery and definition, which results in a problem definition, or design brief. The second is the process of solution development

and delivery. Divergent thinking means that even unusual ideas are considered, and designers do not have a particular solution in mind from the outset. Designers build tangible prototypes, such as models, videos or role-playing exercises, to generate conversation and get feedback from potential users. This means even ‘failed’ prototypes are still useful as they facilitate convergent thinking in the second half of the design process. IDEO, a US design firm, uses a similar pattern of inspiration, ideation and implementation (IDEO Design Kit, n.d.). A fourth ‘i’ might be iteration, as these stages are run repeatedly to refine a prototype.

There are numerous examples of HCD being applied to social problems. In the UK, social entrepreneur Hilary Cottam has used design thinking, along with participatory methods, to reimagine the welfare state, launching experiments in a range of sectors including health, ageing, family life and youth people (Cottam, 2018). DFID, the US Agency for International Development (USAID) and the Australian Department for Foreign Affairs and Trade (DFAT) have applied HCD in programmes including SPRING (SPRING and fuseproject, 2019), an accelerator programme for 75 businesses that

Figure 1 The UK Design Council double diamond



Source: Design Council (2019)

served adolescent girls across nine countries in East Africa and South Asia. The programme, which ran between 2014 and 2019, used a HCD process of research, storytelling and synthesis, framing design challenges, brainstorming solutions and prototyping those solutions.

2.3 Lean startup

The goal of a startup is to figure out the right thing to build – the thing customers want and will pay for – as quickly as possible (Ries, 2011a: 20).

In earlier eras, business success would come from planning, market research and creating and implementing the resulting strategy. This works well when forecasting is based on a stable environment and a track record of operations, but does not work with startups because they operate with too much uncertainty around who their customer is, or what their product should be (Blank, 2013). With the lean startup approach, the job of a startup is to discover the right products to build to provide value to customers, and to develop a business model that works as quickly as possible in order to avoid failure (Ries, 2011a). Rather than spending months or years refining a product or service before sharing it with prospective customers, startups should share early versions to get feedback and create a ‘build-measure-learn’ loop to test the riskiest assumptions behind the business model. Lean startup advocates for the use of ‘minimum viable products’ (MVPs) – that is, building a basic model of the new product to be tested with customers before any large-scale investment. For example, a company might share a crowdfunding campaign, sign-up sheet or video explainer for a product they have not yet created to test demand – this is how Dropbox started (Ries, 2011b). If the MVP is successful, it can be refined. If it fails with customers, the startup knows to change direction.

More recently, this approach has been adapted for larger organisations. Ries (2017) outlines principles of entrepreneurial management in *The startup way*, while *The corporate startup* (Viki et al., 2017) argues for ‘ambidextrous’ organisations that are capable of searching for new business

models while executing a known strategy, with different processes for managing each.

Lean impact, developed by Ann Mei Chang, former Google Executive and Chief Innovation Officer at USAID, is an approach to social good based on the principles of lean startup. The main principles are to think big (set goals based on the size of the need in the real world), start small (to test and learn more quickly and cheaply) and focus relentlessly on impact. Chang acknowledges that social innovation is harder than tech innovation given the social sector’s predilection for planning in advance and the fact that those who pay and those who benefit have different interests. However, MVPs can be used to test hypotheses about impact. FCDO’s Frontier Technologies Hub programme uses a lean impact approach to help apply frontier technologies to tackle development problems. The programme team has used short build-measure-learn loops to test hypotheses about the potential for 3D printing in Nepal, tracking UK aid using Blockchain and introducing electric motorcycle taxis in Rwanda (Rahman, 2018).

2.4 Thinking and working politically

Capacity and technical knowledge alone are insufficient to change deeply entrenched political interests and bureaucratic norms (Teskey, 2017: 2).

TWP is an approach to development interventions that entails *thinking* in a more politically aware way – for instance through political economy analysis as an ongoing process or mindset – and *working differently* as a result, in ways that are tailored to contextual realities and that call for flexibility and adaptation (Rocha Menocal, 2014). While there is no single agreed definition or framework, the TWP Community of Practice (2013) sets out three core principles: ‘Strong political analysis, insight and understanding; a detailed appreciation of, and response to, the local context; and flexibility and adaptability in program design and implementation’. TWP starts with a recognition that developmental change processes are inherently political, and that development programmes are therefore more likely to be

successful when they consider, and have the flexibility to adapt to, local political dynamics (Hogg and Leftwich, 2008). These include the formal and informal ‘rules of the game’, the power and interests of different leaders and groups, and ideas, norms and values. Working politically means that development actors not only tailor interventions to local conditions, but also consider themselves political agents in their own right, and therefore part of the context (Laws and Marquette, 2018).

Working politically may include acting in a politically smart way by supporting or facilitating coalitions and working alliances. Because shifting incentives is a complex undertaking that involves altering power relations, development actors need strong processes for understanding, testing and learning, often with a focus on incremental and small-scale reforms at first. The emphasis is on continual analysis to understand the changing political context and make politically informed decisions, rather than producing a weighty upfront report. This is typified in ‘Everyday political analysis’, a bare bones framework to help frontline staff make politically informed decisions (Hudson et al., 2016). Working politically is often operationalised through adaptive management.

2.5 Adaptive management

USAID (2018a) defines adaptive management as ‘an intentional approach to making decisions and adjustments in response to new information and changes in context’. Adaptive management therefore legitimises changes in tactics and strategy as part of a deliberate approach. While aid programmes using adaptive management should have clear goals, the pathways to those goals are not easily defined ahead of time, meaning that activities and outputs are not specified upfront. Instead, programmes build in deliberate processes of testing, learning and experimentation throughout delivery to discover what will work most effectively. These regular

strategic and tactical reviews allow space to course correct and scale up what works, a process supported by continual and timely evaluation, context monitoring and learning. Adaptive management also emphasises the importance of locally-led problem-solving, meaning that change is led by those within the context rather than being externally driven (Wild et al., 2017). To understand the local context and underlying politics, in practice adaptive management is often supported by processes of TWP.

The principles of adaptive management were articulated by a group of practitioners in the ‘Doing development differently’ manifesto (2014), and have gained currency across the sector since then. Several aid agencies have launched initiatives to integrate adaptive management into the way they work, including LearnAdapt at FCDO, USAID’s Collaborating, Learning and Adapting framework, the Global Delivery Initiative at the World Bank and Global Learning for Adaptive Management, a joint FCDO–USAID initiative.⁴

2.6 Problem-driven iterative adaptation

PDIA is an approach to adaptive management, most often used in government reform processes. It shares DNA with almost all of the approaches discussed above, featuring the time-boxed iterations of agile, the ideation phase from design thinking and the political understanding of TWP. It was first tried in Mozambique in 2009 (Andrews et al., 2018). The Building State Capability programme at Harvard has pioneered PDIA, with a number of projects around the world. The team has shared the approach in various formats, including courses on the practice of PDIA, a book (Andrews et al., 2017) and a toolkit (Samji et al., 2018).

PDIA is a response to stubbornly low levels of capability of developing country governments and the failure of aid programmes that have attempted to reform these institutions. When aid

⁴ Learn more about these initiatives: LearnAdapt (www.odi.org/projects/2933-learnadapt-innovation-and-adaptation-dfid); Collaborating, Learning and Adapting (www.usaidlearninglab.org/cla-toolkit); Global Delivery Initiative (www.globaldeliveryinitiative.org) and Global Learning for Adaptive Management (www.odi.org/projects/2918-global-learning-adaptive-management-initiative-glam).

programmes transplant ‘best practice’ formal institutions from outside, reforms mimic the appearance of change but have little anchoring in contextual realities and lead to very little change in functions. PDIA begins by defining the problem (rather than starting with an imposed solution), and deconstructing it to get at the root causes, with those leading the reform at the core of the process. Ideas for solutions are often identified within context, rather than importing external ‘best practice’. Multiple potential solutions are then tested in short cycles of action and reflection, which are repeated until the problem is solved.⁵

2.7 Common principles of adaptive approaches

As described above and as shown in Annex 1, some principles are common across all these approaches:

1. Acknowledge that the answer is not (and cannot be) known upfront, and that there may not be a single answer.
2. Recognise the importance of the political, social and economic context to understand any given problem or issue.
3. Start with the people you’re building for or working with, and encourage participation and listening.
4. Recognise that understanding a complex system or problem requires interacting with it.
5. Start small, with ‘little bets’ that incur low costs for failure.
6. Be intentional about learning, using research and prototypes to test hypotheses.
7. Measure primarily to learn, rather than to report.
8. Have regular junctures for reflection and learning.
9. Work in loops instead of in a straight line, so that planning, implementation and learning are no longer separate processes.
10. Be pragmatic about process; do what’s needed, not what looks best or is considered ‘best practice’.

There are also some differences, as would be expected for approaches that evolved in different contexts. In particular, development approaches (TWP, adaptive management and PDIA) place a greater emphasis on power and politics, which is largely absent from more technocratic approaches like agile and lean startup. Adaptive approaches in development have a wider range of options for what to create and facilitate – not just products or services, but also forms of collective action. In addition, the idea of scaling can be different. For the private sector, scaling tends to mean creating a product or service that can be replicated and sold to the mass market. The development sector tends to start at the level of a problem and what it would take to sustainably address it – which might come from large-scale roll-out, but could equally come from finding a leverage point in the system or creating the conditions for growth, as explored at the end of the next chapter.

⁵ For more see the Building State Capability programme at the Harvard Center for International Development (<https://bsc.cid.harvard.edu>).

3 Adaptive approaches throughout the programme cycle

People working on adaptive development programmes will be familiar with a programme cycle where they assess and design, implement and adapt, making tactical and strategic changes along the way. In most scenarios, using a single adaptive approach from end to end is not optimal; there is no new best practice for all seasons. Instead, practitioners must engage in *bricolage*, combining and modifying different approaches for their needs. While this places a higher burden on practitioners to understand and apply a variety of methods and ideas, it makes it more likely that there will be a better match between the problem at hand and the way it is addressed. What follows is a guide for those unsure about which approaches to apply when faced with conditions of complexity and uncertainty. Hooking elements of adaptive approaches to the familiar programme cycle may encourage practitioners to experiment and expand their toolbox and ways of working (see Figure 2).

3.1 Enabling adaptation

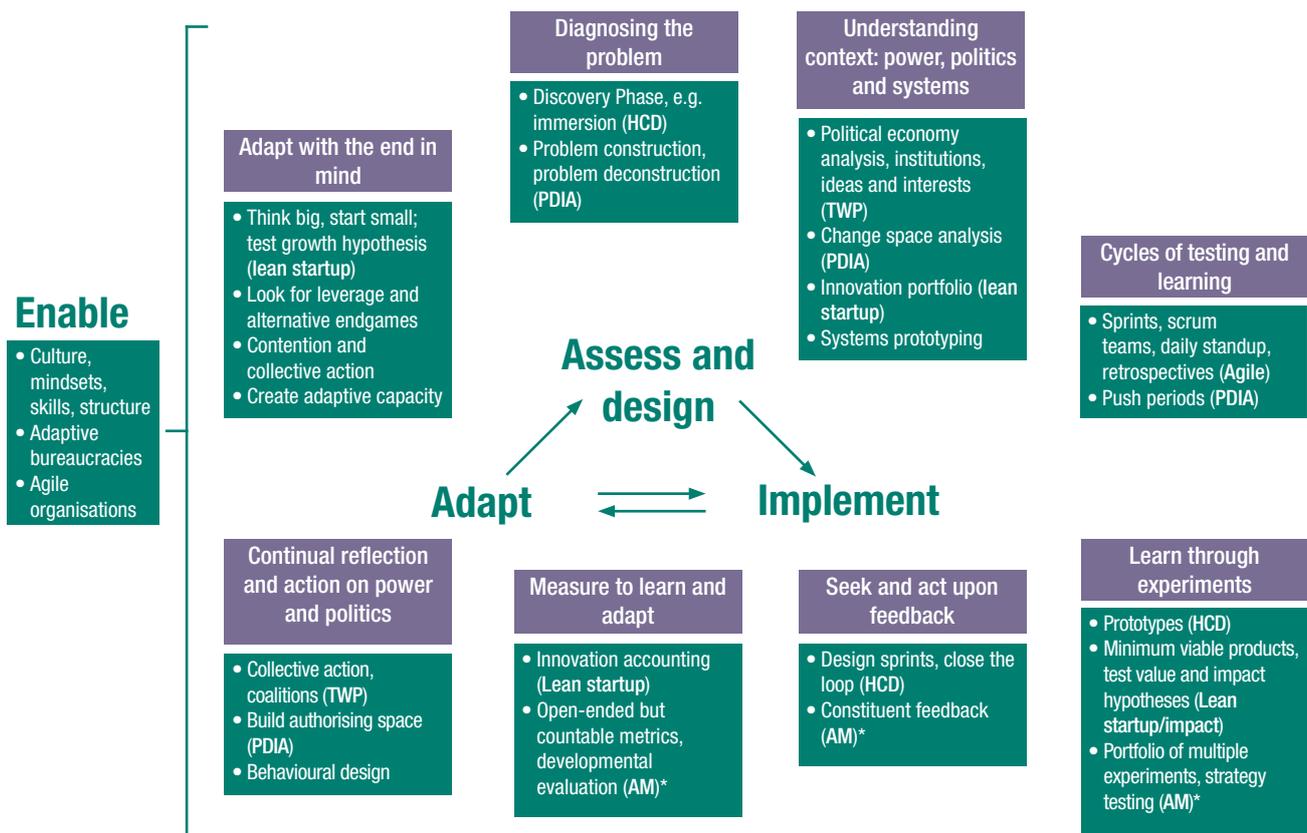
Experience from the private and development sectors tells us that culture, mindsets and skills can often be more important than the adaptive approach chosen.⁶ Practitioners share a recognition of the importance of the wider enabling environment; these approaches do not work as well in an environment of more mechanistic, linear thinking. For this reason, the term ‘agile’ refers not only to working with software itself,

but also to ways of working and how to structure an organisation. Agile organisations typically involve small, cross-functional teams that learn and evolve together, as at organisations such as Spotify, Skyscanner and MercyCorps (MercyCorps, 2017; Freeman, 2018). Agile processes are used in the UK by the Government Digital Service (GDS) (UK Government, 2019). GDS applies different governance principles (e.g. ‘don’t slow down delivery’, ‘decisions where they’re needed at the right level’) and uses different, more streamlined, procurement and contracting approaches to the earlier, ‘learning’ phases of agile projects (HM Treasury, 2018).

The political economy of aid is not the focus of this paper. However, it remains the case that international development actors often find it very difficult to work in adaptive ways because the environment in which they operate does not provide the space and incentives to do so (see for example Natsios, 2010; Rocha Menocal, 2014b; Valters and Whitty, 2017). For example, organisations implementing aid projects face pressure to disburse funding to achieve pre-determined results according to a preset timeline. Accountability tends to be upwards to donors. The constraints of the aid world might mean that embracing a particular adaptive approach or combination of approaches would not be feasible. ODI and FCDO are currently undertaking research into adaptive bureaucracies to explore what characterises organisational environments in which adaptation is possible and encouraged.

⁶ See Goeldner Byrne et al. (2016) and Haugh and Salib (2017) for reviews of this covering adaptive management, and Edmondson (2010) on teams and culture in conditions of uncertainty more broadly.

Figure 2 Adaptive approaches through the programme cycle



Source: Based on Ramalingam et al. (2019: 9)

Note: AM is adaptive management

3.2 Assess and design

3.2.1 Diagnosing the problem

In some contexts, there may be agreement on what the problem is, grounded in evidence, but it is unclear what the potential solutions might be. In these circumstances, there is a need to test, learn and collaborate. At other times, the nature of the problem itself is unclear or contentious, suggesting a need both to determine the underlying nature of the problem, and to develop ways to address it at the same time. Agile delivery is designed to tackle the first type of problem. While there is some uncertainty about what the product will end up looking like, the challenge at hand is relatively structured. The client gives the software development team a set of requirements, and the team responds to this, delivering the highest-value work first. There will, however, be a need for flexibility because what the client needs may be difficult to

articulate and may only emerge once initial work has been delivered.

An important way adaptive approaches can help development practitioners is by challenging over-confidence in a single interpretation of what the problem might be, and reliance on pre-identified solutions or blueprints. In government reform, where the problem is loosely defined, the donor determines a solution, and the government acquiesces by building something that looks like the donor's solution, but which functions more like the status quo (known as 'isomorphic mimicry') (Andrews et al., 2017). Methods from HCD, TWP and PDIA can help practitioners acknowledge complexity, counteract misplaced certainty in a problem definition and avoid importing blueprint solutions that are not grounded in contextual realities.

HCD can help illuminate the underlying nature of the problem, while developing solutions. In the discovery phase, the problem is

explored and defined by getting a range of inputs from interviews, observation and other sources, and synthesising these as a team. This somewhat sidesteps the issue of disagreement in the community the team is designing for; the design team is ultimately responsible for synthesising information and deciding how to define the problem. Where there is mild disagreement this might work well, though it is subject to the biases, blind-spots and privileges of the design team. With more sensitive problems, this process is likely to require a more participatory approach that helps a group come to their own conclusions through dialogue.

Where there is great disagreement between groups on both the problem and potential solutions, we enter the realm of politics. Aid programmes aimed at reform may fail because powerful groups benefit from existing arrangements and resist change (Leftwich, 2011). TWP and PDIA include methods to understand and engage with problems that are deeply political in nature. Political economy analysis prior to an intervention is now a standard part of the toolbox of most aid programmes (see, for example, USAID, 2018b). TWP means that this is not a one-off exercise but a continual process of understanding the political, economic and social context. In PDIA, constructing a problem as a cross-government team means showing the need for real change, creating political momentum for reform. The problem is then deconstructed to get at root causes. Once these are identified, teams look at the ‘change space’ for each one. Is there support from those who can authorise change? Is the need for change accepted by those who will be affected by it? Does the team have the abilities needed to undertake an intervention? Once a problem is better understood, agile could be used for delivering an intervention.

3.2.2 Understanding context: politics, power and systems

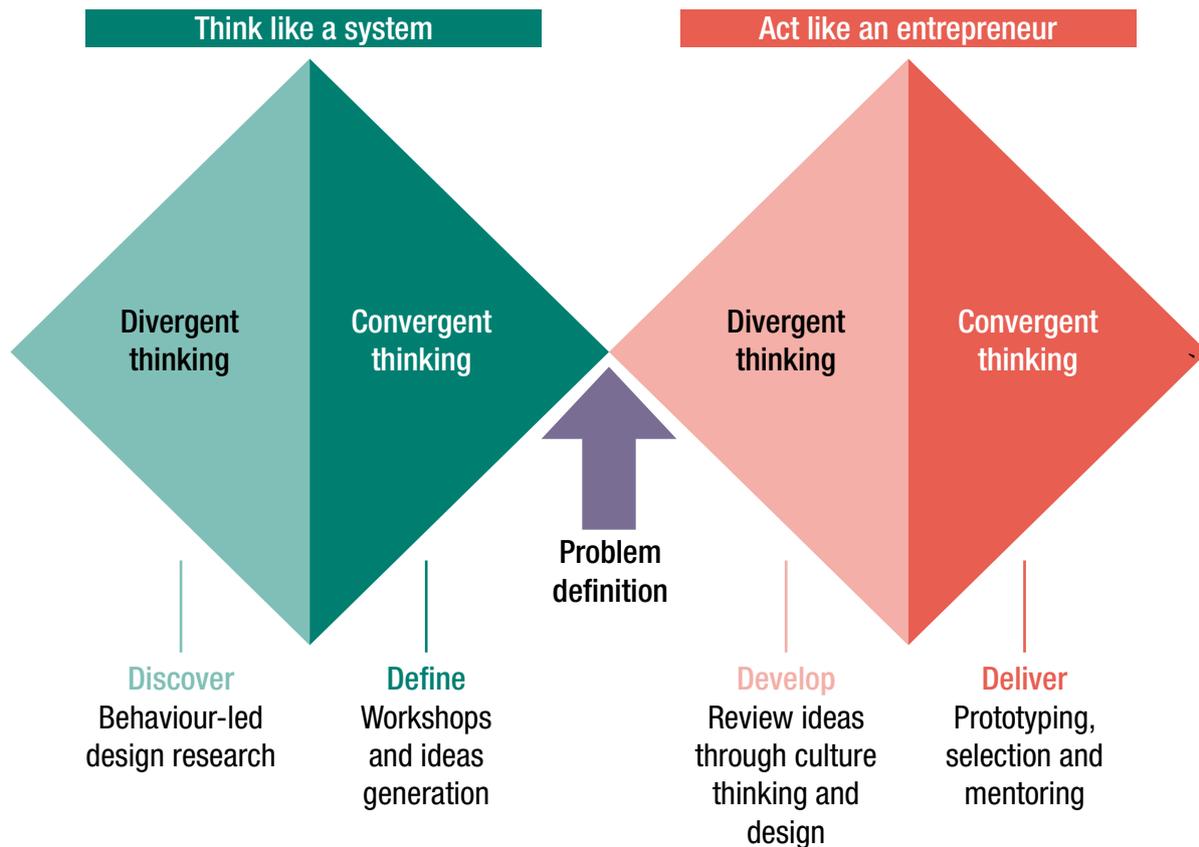
Without properly considering context, interventions and innovations are likely to hit barriers to change, such as competing incentives, cultural norms, power dynamics and the informal institutions that shape how regulatory frameworks operate. The approaches featured here offer a number of tools to better understand

context. For instance, HCD can include a period of immersion in a community. However, Conway et al. (2018) suggest that the conventional double diamond model of design thinking (defining the problem then developing the solution) is not equipped to deal with complex social challenges. They suggest ‘think[ing] like a system, act[ing] like an entrepreneur’ (Figure 3). By starting with framing and mapping the system, practitioners can better understand the problem and its context, before spotting opportunities, prototyping and navigating barriers in an entrepreneurial way. This is akin to the early stages of PDIA, in which the context is explored through the lens of ‘constructing’ the problem.

With a systems lens, it is possible to identify the most effective entry point into a problem – perhaps a part of the system that is ripe for action or influencing (Meadows, 1999). This allows us to be more intentional about designing a portfolio of experiments and potential interventions. This has been called ‘systems prototyping’: ‘experimenting with a range of opportunities for change, but with a coherent (and plural) narrative that links them all together’ (Robinson, 2019). An innovation portfolio can include more disruptive elements alongside incremental improvements.

TWP is likely to be especially helpful in understanding the institutions, power, interests and ideas behind stubborn development challenges by prompting practitioners to ask questions about beliefs, norms, constraints, power dynamics and the space for change. Importantly, this is not a one-off exercise – more information becomes available as an intervention progresses and the context continues to change. Perfect certainty is never possible, so interventions need flexibility and real-time feedback. The humility at the heart of adaptive management, and the opportunities it gives to pause, reflect and change course, means that continual monitoring of the environment can feed into decision-making. In stable situations, uncertainty about context can be reduced through good exploration and analysis. For development challenges in more volatile and opaque contexts, uncertainty can only be reduced (though not eliminated) for a moment in time, but not permanently. For instance, political

Figure 3 Think like a system, act like an entrepreneur



Source: Conway et al., 2018

economy analysis can help in understanding a given setting in its full complexity, but cannot eliminate uncertainty. It can reveal constraints, but does not identify a clear way forward. This explains donors' disappointment with political economy analysis (for example 'Drivers of change' thinking in FCDO). Donors were looking for a tool that would remove uncertainty altogether and enable them to programme in waterfall mode – they were perhaps thinking like a system, but not then acting like an entrepreneur.

3.3 Implement and adapt

By their nature, adaptive approaches do not separate implementation and adaptation into neat components. However, we can derive some helpful principles. We can learn how to create a rhythm for cycles of testing and learning, what to do first to learn most quickly, how to seek out

feedback from users and act upon it, what to measure to inform decision-making and how to continually reflect on power and politics.

3.3.1 Working in cycles of testing and learning

Adaptive approaches all reject linear planning and execution as the main form of delivery.⁷ In their place, they promote working incrementally on smaller chunks through iterative cycles of experimentation, testing and reflection – working in loops instead of a straight line. This helps to verify that a team's thinking is sound and uncover operational challenges early on, based on the principle that a team can only really understand a complex system by interacting with it.

Agile offers more structured processes for testing and learning, working in shorter production cycles known as sprints. Sprints are time-boxed iterations during which specific work has to be completed – these might last about two

⁷ Some elements of adaptive projects are likely to be more predictable and therefore well-suited to a more linear process. The important thing is to diagnose this and respond to each element accordingly.

weeks. Teams aim to deliver high-value work first. Teams are self-organising and cross-functional, with three main roles in the dominant Scrum approach: Product Owner (who liaises with the client, defines the vision for the product and prioritises accordingly); Scrum Master (similar to a project manager who oversees operations and the process); and team members (who create the products). There are regular face-to-face meetings to keep everyone in sync, including a ‘daily standup’ for progress updates and facilitated ‘retrospectives’ at the end of a sprint, where the team reflect on what went well and what could be improved, and plan for the next sprint. These rhythms create space to intentionally pause and reflect; without them, a team may default to rushing ahead with whatever they are working on, even if this is ineffective, or work towards milestones which are no longer relevant. PDIA uses ‘push periods’, based on agile sprints. These include regular planned junctures for reflection and learning, meaning that planning, implementation and learning are no longer separate processes. These cycles can be as short as a couple of days – representing the smallest portion of work necessary to generate useful learning – but will tend to become longer as work progresses. The length of sprints or push periods can also be dictated by how quick and easy it is to make and deliver regular ‘updates’ or iterations.

3.3.2 Learning through experiments

Another principle that adaptive approaches have in common is to start small, with ‘little bets’ that have low costs for failure (Sims, 2011).⁸ Having a portfolio of multiple experiments means that teams are less attached to particular solutions, making it easier to change direction or stop. If a lot of resources are put into one experiment, it becomes difficult to shut it down. In HCD, this is achieved by making prototypes which are tested with potential users.

For lean startup, learning is highly intentional. Startups create MVPs, built solely to test

hypotheses about what customers are willing to pay for (the value hypothesis) and whether there is a viable route to growth (the growth hypothesis). For example, a company might launch a crowdfunding campaign, sign-up sheet or video explainer for a product they have not yet created, in order to test demand. Importantly, the assumptions tested first should be the riskiest ones – those that would break the business model if they turned out to be false. ‘The goal is to eliminate the greatest degree of risk with the least investment of time and money’ (Chang, 2018). Assumptions that have been tested successfully are said to be ‘validated’.

Chang (2018) advocates a similar approach for testing an impact hypothesis in the social sector. Instead of assumptions in a business model, this can relate to steps in a theory of action – describing how an intervention is designed to lead to a desired change. Are we sure one thing will lead to another, and what evidence do we have for that? If evidence is limited, experiments could be designed to test these causal relationships, particularly between inputs, outputs and outcomes. This approach could be used in conjunction with strategy testing, an approach developed by the Asia Foundation to meet the learning and accountability needs of adaptive programmes working on complex problems (Ladner, 2015). In this quarterly structured discussion, the programme team look back at what has happened since the last meeting and review the theory of change in light of what they have learnt about the problem, key actors and political, social and economic dynamics.⁹ This provides an opportunity to consider the health of the whole system, rather than of a single intervention. If the underlying assumptions are no longer valid, the team adjust the theory of change, and the programme strategies change accordingly. Setting out to test some assumptions explicitly through prototypes or MVPs could make this process faster and more intentional, helping a team to make ‘little bets’ to test out

8 Working in smaller chunks does not mean that ambition is small. Chang (2018) combines the principles of ‘think big’ and ‘start small’ in the Lean Impact approach, also phrased as ‘nail it before you scale it’.

9 ‘A Theory of Change is an ongoing process of reflection to explore change and how it happens – and what that means for the part we play in a particular context, sector and/or group of people’ (James, 2011: 3).

potential tipping points in a system, as well as failure points.¹⁰ If this technique was applied to advocacy, for instance, a ‘minimum viable campaign’ could be used to test assumptions about the best ways to achieve wider goals.

Agile, lean startup and HCD have evolved mainly to create products and services; practitioners do not typically aim to challenge power dynamics. Adaptive approaches in development have a wider range of options for what to create: not just products or services, but forms of collective action such as coalitions, movements or campaigns. Approaches such as PDIA and TWP involve bringing together those with a stake in solving a complex problem and helping to facilitate a process to collectively create and test potential solutions. They may ‘work with the grain’ of political institutions and interests in order to make progress where there is support, but project teams tend to be highly conscious of these dynamics. The size of reform coalitions needs to be fit for purpose and, in an echo of lean thinking, ‘it is usually best to have the smallest size necessary to achieve the goal’ (Leftwich, 2012: 22).

3.3.3 Seek out and act upon feedback

Adaptive approaches emphasise ‘getting out there’ to meet customers, clients and constituents to find ideas and get feedback. For instance, Google Ventures uses ‘design sprints’ – a five-day process to answer business questions through mapping problems, quickly sketching solutions, developing a prototype and testing it with users to see if live reactions validate hypotheses (Knapp et al., 2016). This is distinct from conducting more expensive randomised control trials, statistical surveys or academic research, which can produce robust evidence that arrives too late to act upon. Rapid feedback loops in agile and lean startup are often made possible by new technology – releasing in the cloud rather than sending out software in boxes. Traditionally, this kind of feedback is not available in the

development sector. Much development practice remains quite closed and could learn from innovation methods to open up more, earlier, build in much more diverse user feedback and use this information to make decisions (Jean, 2017). While there is a history of constituent feedback in development, in practice this has often been tokenistic or about demonstrating results rather than leading to significant course correction based on this feedback (Anderson et al., 2012); it has not been very clearly linked to adaptive management processes.¹¹

Incorporating and valuing feedback requires cultural change (Anders, 2016). HCD offers a structured way, not only to hear from ‘users’ but also to co-create better solutions and ‘close the loop’ by showing how feedback has led to change. However, there are additional power imbalances to contend with when applying these approaches to development challenges, with longstanding biases in the sector dividing stakeholders into decision-makers and constituents and valuing the perspectives of experts above others (Chambers, 1997). For some development professionals, being adaptive is a means to the end of shifting power away from aid donors and towards the people the money is intended to help, both because this makes programmes more effective and because this is valuable in its own right. Three of the six principles in the ‘Doing development differently’ manifesto centre on local leadership. However, some have criticised this as the weakest element in existing development reform efforts (Muyumbu, 2018). Indeed, it has been easier for aid agencies to adopt more technical aspects of adaptive management than to make more fundamental power shifts (Rocha Menocal, 2014a).

3.3.4 Measure to learn and adapt

Adaptive approaches measure primarily to learn rather than to report, which is a significant contrast to conventional models of measurement in development practice. Adaptive approaches have a shared critique of these traditional

10 As a word of caution, the experience of the LearnAdapt programme suggests that it is not always possible or easy to answer a question with a prototype. It is often necessary to break down assumptions into smaller, short-term hypotheses (see Sparkman, 2015).

11 A forthcoming LearnAdapt paper explores how constituent engagement and adaptive management are combined in practice.

measures: traditional business metrics such as internal rate of return or net present value are seen to make little sense for a completely new product or service; similarly, ‘vanity metrics’ – the number of people attending an event, the number of hits on a website or the amount of money spent – might make a project look good, but do not help us understand whether it is going in the right direction or changing anything in substance. There is often a similar tendency to count and report unhelpful measures in development projects in the name of accountability to a funder. Much of the time, these measure activity rather than progress in solving a problem, creating perverse incentives (Natsios, 2010; Valters and Whitty, 2017).

Innovation accounting, as developed for lean startups, uses different metrics which are more actionable. This might include the number of new ideas generated, the percentage of these which have been tested with MVPs and validated, and the speed of learning (Viki et al., 2017). Metrics may also be more useful at the unit level rather than in aggregate; the percentage of customers who upgrade from a free product to a paid version or the percentage of users who recommend a service to others is more useful information at an early stage of developing a business model than the total number of users. Unit-level metrics can demonstrate that users value the product or service, and that there is a path to growth and sustainability, therefore validating the value and growth hypotheses.

An adapted version of innovation accounting could support adaptive approaches in development. Some adaptive programmes are starting to use equivalent metrics. For example, FCDO’s Economic Policy Incubator programme in Nepal uses open-ended (i.e. not dictating outputs) but countable metrics as part of its PDIA approach. Outcome indicators relate to steps towards solving the problem at hand, such as ‘Number of top 9 cross-sectoral constraints to inclusive and transformational growth significantly eased (cumulative)’, while output indicators include agreeing project plans with partners and the percentage of initiatives adapted

based on implementation experience (Booth, 2018). These measures are helpful for telling the story of what the programme team learned and what they are doing differently as a result. Developmental evaluation is another approach that can support innovation and adaptive management in complex environments (Patton, 2010). Measures and tracking mechanisms are developed quickly as outcomes emerge, and can change over time. The emphasis is on supporting decision-making in real time. This makes it well-suited to situations where both the solution and the context are changing quickly. Once a solution is better-established, it may be riper for robust assessment using a randomised control trial or similar method.

3.3.5 Continual reflection and action on power and politics

Burns and Worsley (2015) describe transformative change as ‘essentially change which shifts power relations’. Any intervention aimed at transformative change is more likely to rub up against the incentives and goals of powerful actors and institutions, creating barriers to change. Even an innovative and technically brilliant service or product could be blocked or made irrelevant by wider systemic and political constraints. While private sector innovators must adapt to changing ideas and preferences, the shifting whims of clients and markets are of a different nature to a turbulent political environment.¹² Adaptive development programmes are not just a process of discovery; they have to consider that what works is often hindered by underlying incentives, institutions and power dynamics. An effective development project is not just about chasing the changing needs and desires of customers; it’s often more akin to actually influencing multiple competing interests, or at least trying to find a way to work through the mess of all these conflicting, changing, imperceptible interests.

This is where it is especially important to think and work politically. For instance, ‘everyday political analysis’ helps people understand interests and change in their daily

12 While agile, lean startup and HCD in themselves do not address political turbulence, companies constantly monitor this in other ways and actively participate in the political arena in the form of lobbying, donations and public relations.

work (Hudson et al., 2016). In PDIA, teams take a proactive approach to gain the support of authorisers such as senior civil servants or ministers who might otherwise block an initiative or be indifferent. By communicating early wins, reformers gain legitimacy and have further authorising space to experiment and refine their solutions. A behavioural design approach, applying insights from behavioural science rather than relying on intuition, could supplement political thinking (Tantia, 2017).

3.4 Adapt with the end in mind

Adaptive approaches in the private sector and in development can show us different ways to think about scale and systems change.

Rather than seeing growth on a linear path, lean impact challenges us to think big but start small (Chang, 2018). Thinking big means considering what it would take to genuinely address the problem, rather than just a small part of it. Having a clear ambition means that the pragmatism of adaptive approaches can be focused on the end goal, rather than on perfect process. However, the flipside to this is that staying small for longer makes it easier to learn more quickly. Furthermore, retaining an experimental approach with multiple solutions at once can help a team stay humble about any particular answer to a problem. Lean startup involves testing whether a product or service could be taken to scale at an early stage. As well as using MVPs to test whether customers would pay for a product or service, lean startups also test the ‘growth hypothesis’ of their route to reaching more customers. For example, will users recommend the product to others? What will the mass market pay for? Is it possible to reduce costs?

Systems thinking tells us that, in a non-linear world, the size or scale of an intervention is not necessarily a useful guide to the scale of its impact. In a complex system, ‘scale’ may be the wrong metaphor to use as it suggests replicating or increasing the size of a particular intervention.

Instead, we might consider how to create the conditions for growth. This could take a number of paths:

- **Look for leverage, and then look again:** To create transformation, we should search for opportunities where a relatively small effort could lead to large change and open up new possibilities. TWP and PDIA provide tools to undertake this diagnosis. These should be used continually. Working to scale up a specific solution could blind innovators to other, more catalytic roles they could potentially play. Thus, strategy testing can be used to examine assumptions behind change efforts on a regular basis as the system itself evolves (Ladner, 2015).
- **Consider how others might take up an idea:** An intervention can grow in scale and impact without an organisation needing to grow with it. Gugelev and Stern (2015) list six ‘endgames’ or roles to play in the overall solution to a social problem: open source, replication, government adoption, commercial adoption, mission achievement and sustained service. Only the final option implies continued and increased operations as a project or organisation. Ideas from lean startup can help to test for potential demand from other stakeholders. For instance, FCDO’s Frontier Tech Livestreaming programme uses ‘yes, if’ sprints. The programme team asked potential investors in electric motos in Rwanda what exactly it would take to invest in the idea (Rahman, 2019). This helped with decision-making about how to use resources. Depending on how much contexts vary, interventions might be copied exactly or altered substantially to make them more culturally appropriate. HCD could be used in this process of adaptation to quickly understand the needs of potential users, build prototypes to test in the new context and create rapid feedback loops.
- **Contention and collective action:** Complex problems are very rarely solved by a

single intervention or by one actor.¹³ It takes a combination of smaller changes and people working in coalition to create sustainable change. Yanguas (2018) suggests we think of change processes in terms of contention, rather than diffusion of an idea: ‘Development is not a single process of change, but a tug-of-war between reform mobilisation and demobilisation’. This implies that a linear path to scale is less relevant in more political contexts, and collective action becomes more important. Coalition theory tells us that the optimal size of coalitions depends on the sort of change they are trying to bring about (Leftwich, 2012). Wide-ranging social change probably does require a broad coalition, but a coalition to drive a specific policy change can be narrower, more temporary and consist of a critical mass of well-connected individuals. Having different possible endgames beyond scaling an intervention helps in thinking through what different forms of success might look like.

- **Create adaptive capacity:** Challenges such as providing high-quality education or healthcare across a country require governments, development actors and the private sector to have the adaptive capacity

to deal with complex problems. Indeed, Ang (2017: 4) suggests that the adaptive development community must go beyond ‘dispensing obvious advice like “avoid mimicry” and “promote innovation”’. The relevant question is instead, “How can we create conditions that enable adaptation?”’. The best way to build this capacity is to successfully move through an adaptive challenge (Heifetz et al., 2009). For aid programmes, this requires working with people within the system, and is a challenge akin to a company helping other organisations to undertake design thinking for themselves.

Finally, perhaps we should not always seek to scale. Small can be beautiful. Development actors often work on difficult problems in difficult places where even a rigorous process of searching will not result in a single solution that can be scaled up and replicated. In particular, a commitment to ‘leave no one behind’ requires deep interventions that may vary significantly from place to place.¹⁴ Another form of success that does not involve scaling is ‘mission achievement’, where an intervention is redundant because the original problem it was addressing has been solved.

13 Equally, this means that a donor should not try to address every aspect of a problem through different projects. Tackling complex problems does not necessarily entail a highly complicated intervention with many parts. See Sharp et al. (2019) for a full discussion on this in the context of DFID.

14 Positive deviance is one adaptive approach that can work well in such contexts. See Pascale et al. (2010).

4 Conclusion

The approaches discussed in this paper have evolved in different contexts, but have a great deal in common. The historical usage of a method does not in and of itself determine the scope of contexts in which it can be valuable. For those working in international development, having a diversity of approaches to draw on, including those from outside the development sphere, can be very useful. Given the increased recognition of and focus on complex problems in uncertain environments, adaptive approaches are particularly important. By looking at the roots of such approaches, comparing them and mapping them onto the adaptive cycle, this paper has sought to show how international development actors can draw from them, and make practical use of them.

These approaches can be frameworks to help practitioners to think in terms of systems (including political dynamics) and act like entrepreneurs. They nudge us to take context seriously, test our ideas in the real world, listen more intently and be humbler. Private sector adaptive approaches such as agile, lean startup and HCD can be especially helpful for experimenting more quickly to find a creative solution to a development challenge – particularly if this is a product or service. This is especially relevant for development programmes that work through private sector or market approaches. For these, private sector approaches work with little alteration, and can often be fruitfully combined; the different methods serve different purposes. For example, practitioners use HCD to surface and understand problems and user needs, and lean startup to build and test solutions to those problems. Lean startup can combine with agile for testing and building.

More commonly, though, where development challenges are about systemic change and changing behaviours and incentives (like any public policy challenge) in a political arena, private sector approaches need to be adapted. In these cases, they may need to be used in conjunction with elements of TWP, systems thinking and adaptive management. PDIA is one such adaptation – applying agile and lean principles to system change and technical assistance in government systems.

Adaptive aid programmes should experiment with different combinations and sequences of adaptive approaches according to the kind of problem and context faced. PDIA is an off-the-shelf example of this, but it is not the only possible combination. Lean impact adds a social impact element to the lean startup approach, though it does not seem well-suited to more politically turbulent environments. What might it look like to try TWP and lean impact together? How about HCD and adaptive management? Could MVPs be used in conjunction with strategy testing to interrogate assumptions more explicitly? The prize is to try this at intervention level. There is no inherent reason why elements of agile, lean startup and HCD could not be used in systemic change efforts, if they are embedded as single experiments in a portfolio of initiatives that is designed to shift the system. These experiments can be products or services but can also be coalitions. Documenting such combinations so as to better understand what works in which contexts could provide international development actors like FCDO with an invaluable opportunity for learning and improving development practice.

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Annex 1 Summary of adaptive approaches

Table A1 Summary of adaptive approaches

| | Agile | Human-centred design (HCD) | Lean startup and Lean impact | Thinking and working politically (TWP) | Adaptive management | Problem driven iterative adaptation (PDIA) |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| What problem does it solve? | Lengthy linear (waterfall) design processes meant software was out of date by the time it was released and did not meet users' needs | Products and services are created without taking needs and preferences of users/communities into account. Lack of creativity to solve complex problems | Figuring out the right thing to build – the thing customers want and will pay for – as quickly as possible – and therefore not failing in conditions of extreme uncertainty | The anti-politics machine – international development actors imposing technical fixes to inherently political problems | Many development initiatives fail to address complexity, promoting inappropriate and rigid interventions that will have little impact | Stubbornly low levels of capability of developing country governments and the failure of aid programmes that have attempted to reform these institutions |
| Original sector | Software development | Products, services, systems | Startups, technology, manufacturing | International development, governance | International development | Governance (broad sense) |
| Roots and influences | Spiral development, extreme programming, Scrum, Agile manifesto (2001) | Design science (1960s), design as way of thinking (1970s), IDEO (1991) | Lean manufacturing (Toyota), Six Sigma, Agile | Critical anthropology, political science, political economy, complex systems science, sociology, history | Decades of development literature (and critique). Management literature on learning and adaptive organisations | Management literature, lived experience of practitioners, lean, agile, HCD, TWP |
| Core principles | (1) Individuals and interactions over processes and tools (2) Working software over comprehensive documentation (3) Customer collaboration over contract negotiation (4) Responding to change over following a plan The Agile Manifesto (Beck et al, 2001) | HCD is all about: (1) Building a deep empathy with the people you're designing for (2) Generating tons of ideas (3) Building a bunch of prototypes (4) Sharing what you've made with the people you're designing for; and eventually (5) Putting your innovative new solution out in the world (IDEO Design Kit, n.d.) | Lean startup favours: Experimentation over elaborate planning Customer feedback over intuition Iterative design over traditional 'big design upfront' development (Blank, 2013) | (1) Strong political analysis, insight and understanding (2) Detailed appreciation of, and response to, the local context (3) Flexibility and adaptability in programme design and implementation (TWP Community of Practice, 2013) | (1) Focus on solving local problems that are debated, defined and refined by local people in an ongoing process (2) Legitimise reform at all levels (political, managerial, social), building ownership and momentum throughout the process (3) Work through local convenors who mobilise all those with a stake in progress | (1) PDIA focuses on solving locally nominated and defined problems in performance (2) It seeks to create an 'authorising environment' for decision-making that encourages 'positive deviance' and experimentation |

| | Agile | Human-centred design (HCD) | Lean startup and Lean impact | Thinking and working politically (TWP) | Adaptive management | Problem driven iterative adaptation (PDIA) |
|---------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Core principles (cont.) | | | | | (4) Blend design and implementation through rapid cycles of planning, action, reflection and revision (5) Manage risks by making 'small bets', pursuing activities with promise and dropping others (6) Foster real results – real solutions to real problems that have real impact (DDD Manifesto, 2014) | (3) It embeds this experimentation in tight feedback loops that facilitate rapid experiential learning (4) It actively engages broad sets of agents to ensure that reforms are viable, legitimate, relevant and supportable (Andrews et al., 2012) |
| Key concepts | Building incrementally, sprints, retrospectives | Prototyping, user experience, co-creation | Validated learning, pivot, value, growth and impact hypotheses | Working with the grain; 'politically smart'; institutions, interests and ideas | Locally led problem-solving, small bets, convening and brokering | Isomorphic mimicry, authorising space, positive deviance |
| Working patterns and techniques | Time-boxed iterations (sprints), sprint retrospectives and planning, daily stand-ups, Scrum teams | Inspiration, ideation, implementation; double diamond; diverge and converge; immersion; design sprints | Build, measure, learn, decide. Think big but start small. Innovation portfolio, MVP | Understanding, testing and learning. Everyday political analysis, political economy analysis (PEA), coalitions | Rapid cycles of planning, action, reflection and revision, portfolio of multiple experiments, strategy testing, collective action | Problem construction and deconstruction, identify change space, trawl design space, rapid cycles of action and learning |
| Measurement and learning | Reflective learning, sprint retrospectives, evidenced by speed | Validation, insights, user value | Innovation accounting; validated learning | Open-ended and process indicators, outcome harvesting, Strategy Testing, greater use of qualitative case studies | Outcome mapping, rapid data collection and course correction, developmental evaluation, citizen feedback, open-ended but countable metrics | Problem solved, milestones, building authorising space |
| Learn more | Agile in a Nutshell: www.agilenutshell.com | Design Kit from IDEO.org: www.designkit.org | Lean Startup Principles from Eric Ries: http://theleanstartup.com/principles | TWP Community of Practice: https://twppcommunity.org/ | Doing Development Differently manifesto: https://buildingstatecapability.com/the-ddd-manifesto | The Building State Capability programme at Harvard Center for International Development: https://bsc.cid.harvard.edu/ |



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